The purpose of these two-year post-residency VA Optometric Research Fellowship **Programs** is to ensure the continuation and future development of VA optometric research in age-related eye diseases and vision disorders, to improve visual rehabilitation capabilities, and to enhance visual outcomes.

Selected fellows will receive guidance from one or more preceptors with proven records of optometric clinical research, or research relevant to optometry, such as biomedical research, rehabilitation research and development, and health services research and development.

Research, education, and clinical fellowship training experiences may focus on areas such as: eye and vision disorders; age-related vision loss from macular degeneration, glaucoma, diabetic eye disease, etc.; use of new technologies, including telemedicine, for glaucoma, diabetic and other eye disease conditions; low vision rehabilitation strategies; low vision device development and evaluation; dual sensory impairment issues; visual rehabilitation outcomes, etc.

### BENEFITS OF A VA FELLOWSHIP

- An outstanding two-year clinical research and patient care experience serving a challenging and rewarding veteran population
- A stimulating interdisciplinary environment where the resident learns to conduct research and coordinate quality optometric eye care with other health care services to maximize patient care outcomes and learning experiences
- Research and academic opportunities mentored by experienced clinicians and preceptors who are among the most published optometrists and vision scientists
- · Vacation, national holidays, and sick days along with authorized absence for approved continuing education
- Competitive annual salary
- Health & Life Insurance plans available

Each VA fellowship program is unique as experiences and opportunities are different at each site. More specific fellowship program information can be obtained by contacting the individual sites.

# RESEARCH FELLOWSHIP TRAINING

The fellowship program is designed to develop individual potential for research careers relevant to VA optometry. At least 75% of fellowship time is to be devoted to biomedical, clinical, rehabilitation, or health services research, including didactic education related to research. Up to 25% of fellowship time may be allotted to advanced clinical and/or teaching activities.

# RESIDENCY COMPLETION REQUIREMENT

Successful completion of an ACOE accredited optometry residency program in geriatrics, hospital-based, ocular disease, low vision rehabilitation, or primary eye care is required.

# OTHER ELIGIBILITY CRITERIA

Applicants must be U.S. citizens and have a full and unrestricted therapeutic pharmaceutical agents license to practice optometry in any state, commonwealth, or territory of the United States, or in the District of Columbia before the beginning of the fellowship. The license does not have to be from the state where the fellowship program is located.

VA Form 10-2850b, Application for Residents, NBEO examination results, evidence of TPA optometry licensure, DEA certification, education/training verification, U.S. citizenship documentation, VA physical examination completion, and reference letters should be sent directly to the VA Optometric Research Fellowship Program of interest to the

# LAUptometry Research Fellowship Programs & Department of Veterans Affairs

# **VA Boston Healthcare System**

The VA Boston Healthcare System, (VABHCS) the largest consolidated facility in VISN 1, encompasses 3 main campuses and 6 outpatient clinics within a 40 mile radius of the greater Boston area. The consolidated facility consists of the new state of the art Ambulatory Care Center Jamaica Plain Campus, located in the heart of Boston's Longwood Medical Community: the West Roxbury Tertiary Care Campus, and the Ambulatory and Chronic Care, Brockton Campus, located 20 miles south of Boston. The VABHCS has affiliations with the New England College of Optometry, Harvard Medical School and Boston University School of Medicine.

Our intent is to provide optometry research fellows with a strong foundation for lifelong learning, intellectual achievement and a sustained interest and commitment to optometric research. Our program is structured to offer the appropriate candidates an opportunity to work in a number of ongoing studies to help identify a research area of interest and a mentor. We have an affiliation and / or collaborate with a variety of ongoing research projects. Activities of the current Fellow at VARHCS to date include:

Advanced clinical training as an attending one day per week at the tertiary center of the VABHCS

Class instructor two weekly sessions Integrative Seminar a course for second year optometry students at the New England College of Optometry (NEWENCO)

### **Didactic Activity:**

Two courses in the NEWENCO Master of Science Program:

Research Seminar, a weekly discussion of peer-reviewed original journal articles, and analysis of research methods and design and NEWENCO Research, a course presented by the research faculty centered on their ongoing research projects.

### **Research activities:**

- Team member in the ongoing research projects of the VHABHCS Ocular Telehealth Center:
- JVN Telemedicine Project: A Joslin, VA, DOD, Cooperative Project, VABHCS.
- · Glaucoma Eye Care a Joslin/VA Telemedicine Collaborative Project, VABHC
- · VA Ocular Telehealth Glaucoma Suspect Cohort Study
- Team member for a study evaluating psychophysical testing for diabetic retinopathy
- Prepared two Internal Review Board (IRB) submissions
- Evaluation of clinical utility of mfVEP in diabetic patients

# **Publications and Posters:**

- Poster: The Role of Imaging Technologies in the Diagnosis of Vasospastic Focal Glaucomatous Optic Neuropathy in a 52 year old Woman, American Academy of Optometry, Tampa FL
- · Poster: Heidelberg Retinal Tomograph II Retinal Module for Nondiabetic Acquired Macular Disorders American Academy of Optometry, Tampa FL
- In preparation: The Role of HRT II Macular Edema Module in Adult-Onset Vitelliform Macular Dystrophy

### **Future Research:**

- Application of new technology to improve the diagnosis and management of glaucoma evaluating the use of multifocal visual evoked potential
- ${}^{\raisebox{-3pt}{\text{\circle*{1.5}}}}$  Evaluation of clinical utility of mfVEP in diabetic patients.



Tele-retinal Imaging

# **VA Boston Healthcare System**

Jamaica Plain Division Optometry Clinic (112B) 150 S. Huntington Avenue Boston, MA 02130

(508) 583-4500 x2101

Fellowship Areas: Vision Rehabilitation, Telemedicine, Epidemiology, Geriatrics, Clinical Trials, Clinical Detection, Treatment and Prevention Trials, Quality of Life Trials and Outcomes Assessments

Fellowship Coordinator: Barry M. Fisch, O.D.;

Affiliated School/College of Optometry: NEWENCO Number of Fellows: 1 yearly - 2 year appointment

# **Birmingham VA Medical Center**

The Birmingham VA Medical Center is an acute tertiary care facility located in the historic Southside district of the city and within the University of Alabama at Birmingham Medical Center complex. The facility provides acute tertiary medical and surgical care to veterans of Alabama and surrounding states. The medical center serves as the primary referral center for this population area with 135 operating beds. Recent construction provides state-of-the-art facilities and equipment in all clinical programs. Care is provided in nearly all medical and surgical specialties and subspecialties. The BVAMC operates six Community Based Outpatient Clinics in North Alabama, The 32-bed Southeastern Blind Rehabilitation Center is one of nine in the VA system.

The University of Alabama at Birmingham School of Optometry offers the opportunity to receive a Master's degree in Vision Science concurrently with the Optometric Fellowship Program. The Vision Science Research Center's mission is to promote vision science research, facilitate collaborative investigations and add to the scientific knowledge of the eye and central visual pathways leading to improved diagnosis, treatment and prevention of blindness and visual impairment. The Center currently has 56 appointed faculty members representing 16 departments and 7 schools at UAB. The Fellow may choose a mentor in any specialty area of interest.

# **BVAMC Ontometric Research Activities**

# **Enhancing Mobility in the Visually Impaired (VA RRD)**

Major Goals: Rehabilitation of veterans with vision loss is of special importance to the VA. One goal of the rehabilitation process is to improve upon the ability of visually impaired veterans to travel safely and independently. The experiments will provide important information about the feasibility of enhancing visual cognitive functions required for mobility by visually impaired persons, and could have important applications for improving mobility performance, reducing risk of adverse mobility incidents, and enhancing quality of life among visually impaired individuals.

### Caregivers Intensified Low Vision Rehabilitation BRC Program (Atlanta VA RRD)

Major Goals: The purposes of this VA Rehabilitation R&D Center pilot study are to learn more about visually impaired caregivers and to study the effects of a short, intensive blind rehabilitation (BRC) program on a sample of legally blind veterans who are also serving as the primary caregiver for an ailing or disabled spouse or family member.

### **Estimating Functional Vision in Visually Impaired Individuals**

Major Goals: To determine if combined results of visual acuity and visual field tests, using procedures outlined in the AMA Guides for the Evaluation of Permanent Impairment is more highly correlated with self reported functional ability in persons with vision loss, than results of either test alone.

Computerized visual search training

Optometry (112-C)

700 South 19th Street

Birmingham, AL 35233

(205) 933-8101 x6118



Walk through of high-density obstacle courses



# **VA Palo Alto Healthcare System**

The VA Palo Alto Health Care System is a tertiary facility located in Silicon Valley and has affiliations with the School of Optometry, University of California Berkeley and the Medical School, Stanford

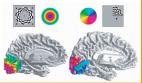
### Orientation:

The Optometric Research Fellowship is designed to provide optometrists interested in low vision the opportunity to develop and hone clinical research skills while maintaining their clinical skills. The programs orientation stresses the interdisciplinary nature of vision rehabilitation by providing interactions with faculty who have expertise in audiology, geriatrics, and telemedicine, as well as optometry and research. The core of the program emphasizes research methods and statistical analysis in an applied setting. Each fellow, in addition to participating in ongoing studies, is expected to develop a unique research project and carry it out so as to gain a knowledge of all aspects of clinical research (from idea development to Institutional Review Board and Research and Development Committee approval to complete paper/publication) are covered.

The Palo Alto Fellowship has an emphasis on low vision, however because of our unique setting this includes patients with moderate to severe low vision and covers the adult life span. Programs provide services to a large in-patient population that facilitates subject recruitment, as well as outpatients who can also be assets for research activities. Current studies emphasize near and distance tasks in an interdisciplinary approach to studies of vision rehabilitation, but extensive opportunities exist to tailor research projects to the specific interests of research fellows.

Visual impairments are becoming increasingly common due to the aging of the veteran population. These impairments negatively impact the functional abilities of people and contribute to a decreased quality of life, as well as increased health and mortality risks. The VA Palo Alto low vision research program is internationally recognized and offers an excellent opportunity for clinicians to develop the research skills and knowledge necessary for them to enter a career in

fMRI (functional Magnetic Resonance Images) view of the visual cortex. These illustrate a project we are cooperating on with Brian Wandell of Stanford University who is using the fMRI technology to explore the effect of eve pathologies on brain activity, and how the brain responds to changes in the visual field resulting from age-related eye disease.



### **Birmingham VA Medical Center** Fellowship Areas: Ocular Disease, **VA Palo Alto Healthcare System** Visual Impairment & Low Vision Rehabilitation, Geriatrics,

Fellowship Coordinator: Lyman C. Norden, O.D.; Email: Lyman.Norden@med.va.gov

Affiliated School/College of Optometry: UAB Number of Fellows: 1 yearly - 2 year appointment

Rehabilitation Research & Development, Clinical Research

Palo Alto VA Medical Center

WBRC/Optometry (124) 3801 Miranda Avenue Palo Alto, CA 94304

(650) 493-5000 x64358

Fellowship Areas: Visual Impairment & Low Vision Rehabilitation, Gerontology, Dual Sensory Impairment, Telemedicine, Rehabilitation Research & Development

Fellowship Coordinator: Gregory Goodrich, Ph.D.; Email: Gregory.Goodrich@med.va.gov

Affiliated School/College of Optometry: UCB Number of Fellows: 1 yearly - 2 year appointment

Email: Barry.Fisch@med.va.gov